

#37 M Andy D 9.24.02

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Attn: BOX RCE

Mitsuaki OSHIMA et al.

Docket No.00177/MU-1296/P9558-04

Serial No. 09/244,037

Group Art Unit 2634

Filed February 4, 1999

Examiner A. Le

**COMMUNICATION SYSTEM** 

RECEIVED

MAR 2 5 2002

**Technology Center 2600** 

## **AMENDMENT**

Assistant Commissioner for Patents, Washington, D.C.

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Sir:

Please amend the above-identified U.S. patent application as follows:

## IN THE CLAIMS:

Please cancel all of the pending claims, i.e., claims 1, 8, 10, 22, 23, and 25-28. Please add new claims 29-38 as follows.

29. A signal transmission and reception apparatus for transmitting and receiving an n-level VSB signal, the apparatus comprising a transmission apparatus and a reception apparatus.

said transmission apparatus comprising:

a modulator operable to modulate an input signal into an n-level VSB modulated signal, and to allocate code points along a uniaxial modulation coordinate system, said modulator comprising a filter having a plurality of coefficients which are a series of impulse responses defined by plotting time base responses to the VSB modulated signal along an in-phase axis and an orthogonal axis for filtering a series of said code points allocated along the uniaxial modulation coordinate system, and

a transmitter operable to transmit the VSB modulated signal; and said reception apparatus comprising:

a receiver unit operable to receive a transmitted n-level VSB modulated signal, and

Cont